

diffuse. White lineation of body much reduced; the upper shoulder-stripe very short on one side in the single skin and absent on the other. Lower shoulder-stripe broken into spots. Vertical bands inconspicuous, three on one side and four on the other, but only the two middle bands at all prominent. Five stripes mentioned in Heuglin's description.

Female. General colour bright rufous, but the nape and the middle line of the back over a breadth of about 4 to 6 inches fuscous brown, in unusual contrast to the rufous sides. White stripes numerous and conspicuous; the lower shoulder-stripe prominent, well-developed, continuous, rather longer than usual; upper shoulder-stripe, on the other hand, narrow and little developed. Vertical stripes very numerous, 9 on one side and 10 on the other, therefore more in number (though hardly so broad and sharply defined) than in *T. s. scriptus*.

Basal length of male skull (c.) 196 mm., greatest breadth 90. Horns (in straight line) 258 mm.

Female skull: basal length 193 mm., greatest breadth 86, orbit to muzzle 107.

This Nilotic form of the Common Bushbuck is distinguished by having its female more numerously striped than the male, the sexes being about equal in this respect in *T. s. scriptus*, and the male more striped than the female in *T. s. ornatus*; also by its well-haired neck, which separates it from *T. s. fasciatus*.

Singly the sexes may be distinguished—the male by its few and the female by its many stripes from the corresponding sexes of the allied subspecies, and the female is also characterized by the contrasted fuscous area on the back.

4. Revision of the Rhynchota belonging to the Family *Pentatomidæ* in the Hope Collection at Oxford. By W. L. DISTANT.

[Received June 18, 1900.]

(Plates LII. & LIII.)

In the years 1837 and 1842 there were published at Oxford Parts I. and II. of 'A Catalogue of Hemiptera in the Collection of the Rev. F. W. Hope,' which still form part of the well-known "Hope Collection" in the Oxford Museum. Part I. bears no name of author, and the descriptions therein have very often been ascribed to Hope, as his name is appended to the nomenclature. Part II. is stated to have been written by the late Prof. Westwood, and there is no doubt that he was the author of both, and that conclusion is now generally followed by entomologists.

The publication consists of short Latin descriptions of a considerable number of species considered as then undescribed; but of these many now rank only as synonyms and mostly require generic revision—a result which causes little surprise when the

fragmentary knowledge of the Order in those days is considered, with the obscurity that then enshrouded the Fabrician species, which Westwood seems to have almost ignored. Much of this synonymy has been elucidated, especially by the late Dr. C. Stål, who in 1862 visited this country, examined the collection and made notes thereon, which were published in the Öfv. Vet.-Akad. Förh. 1862, p. 501. These were again given, sometimes in a revised form, in his subsequent 'Enumeratio Hemipterorum.' Like all Stål's work, this casual examination produced reliable correction, but much was still left in an obscure condition, and our catalogues contain many doubtful references to a number of Westwood's species described from this collection.

I have to thank Prof. Poulton, who has succeeded Prof. Westwood at Oxford, for placing the whole collection in my hands for comparison and revision. I have carefully compared all the types with those contained in the British Museum and my own collection, with the result of finding that though many of Westwood's species must rank as synonyms, he has on the other hand priority in many cases over the descriptions of more recent workers, who have failed to recognize his species by their short descriptions and unrevised generic position. It is probable that Continental describers may also be compelled to withdraw some of their own descriptions for a similar reason, and the figures with which the Society has allowed me to illustrate this communication may facilitate that result.

Some few species are in such indifferent condition as to render generic identification impossible—at least with certitude; but in most cases these are figured, and thus eventually, when better specimens reach the hands of workers, they can be recognized and then generically disposed.

Subfam. DISCOCEPHALINÆ.

DINOCORIS UNICOLOR.

Dinidor unicolor Westw. in Hope Cat. i. p. 25 (1837).

Antileuchus piceus Dall. (part.) List Hem. i. p. 165. n. 6 (1851).

Dinocoris unicolor Stål, En. Hem. ii. p. 9. n. 16 (1872).

Dinocoris piceus Dist. (part.) Biol. Centr.-Am., Rhynch. i. p. 46. n. 2 (1880).

In the Biol. Centr.-Amer. I had followed Dallas in placing the *D. unicolor* Westw. as a synonym of *D. piceus* Pal. Beauv. On examination I find the two species are quite distinct, that of Westwood having a greater width of abdomen and the upper surface distinctly rugose.

DINOCORIS TESSELLATUS.

Dinidor tessellatus Westw. in Hope Cat. i. p. 24 (1837).

Dinocoris tessellatus Stål, En. Hem. ii. p. 9. n. 14 (1872).

A species closely allied to the *D. amplus* Walk., but having the second and third joints of the antennæ wholly black.

Subfam. PENTATOMINÆ.

SPUDEÆUS PARVULUS. (Plate LII. fig. 1.)

Halys parvula Westw. in Hope Cat. i. p. 22 (1837).

The species identified with this by Dallas (List Hem. i. p. 169, 1851) is altogether different, and must not be treated as the same, as has been enumerated by Stål, and catalogued by Lethierry and Severin.

DALPADA CLAVATA.

Cimex clavatus Fabr. Ent. Syst. Suppl. p. 532 (1798).*Halys latipes* Westw. in Hope Cat. i. p. 23 (1837).*Halys concinna* Westw. loc. cit.

NEVISANUS ALTERNANS.

Halys alternans Westw. in Hope Cat. i. p. 22 (1837).

Nevisanus orientalis Dist. Ann. & Mag. Nat. Hist. ser. 6, vol. xi. p. 391 (1893).

ORTHOSCHIZOPS ASSIMILIS. (Plate LII. fig. 2.)

Halys assimilis Westw. in Hope Cat. i. p. 21 (1837).*Orthoschizops assimilis* Stål, En. Hem. v. p. 49. n. 8 (1876).

ORTHOSCHIZOPS ? RUGOSUS. (Plate LII. fig. 3.)

Atelocerus rugosus Westw. in Hope Cat. i. p. 21 (1837).

The type and only specimen which I have seen is without the abdomen, and is consequently unable to be strictly identified in a generic sense. It seems, however, to belong to the genus *Orthoschizops*.

(?) HALYS RUFESCENS Westw. in Hope Cat. i. p. 24 (1837).

This species is recorded by Stål (En. Hem. v. p. 42, 1876) as belonging to the genus *Pæcilometis*. It is not, however, contained in the type collection forwarded to me from Oxford.

(?) HALYS DENTIPES Westw. in Hope Cat. i. p. 24 (1837).

I have the following note from Oxford relating to this species—
“*dentipes* is missing, space empty, specimen not to be found.”

KALULA, gen. nov.

Body elongate. Head long, about two-thirds the length of the pronotum, the lateral margin sinuate and slightly widened, rounded, and moderately laminate at the apices of the lateral lobes, which are a little longer than the central lobe and cleft centrally; antennæ moderately short, first joint not nearly reaching apex of head, second joint considerably passing it, fourth and fifth joints distinctly thickened; ocelli much nearer eyes than to each other; rostrum reaching the posterior coxæ. Pronotum distinctly depressed from between the pronotal angles, which

are obtusely prominent at about the centre of the lateral margins, from which the margins are concavely sinuate to apex. Scutellum about half the length of abdomen. Abdomen unarmed.

I have placed this genus near *Ocrophara* Stål, from which, apart from other differences, it may be distinguished by the shape and structure of the head.

KALULA VARICORNIS. (Plate LII. fig. 4.)

Ælia varicornis Westw. in Hope Cat. i. p. 33 (1837).

Hab. Gambia.

DICTYOTUS SEMIMARGINATUS.

Pentatoma semimarginata Westw. in Hope Cat. i. p. 42 (1837).

Westwood gave no locality for his species, but the British Museum possesses specimens from Baudin Island, West Australia.

Antennæ with the first and second joints ochraceous, third, fourth, and fifth joints piceous, apices of third and fourth joints ochraceous.

DICTYOTUS CÆNOSUS.

Pentatoma cænosa Westw. in Hope Cat. i. p. 42 (1837).

Pentatoma vilis Walk. Cat. Het. ii. p. 309. n. 147 (1867).

Dictyotus vilis Dist. Ann. & Mag. Nat. Hist. ser. 7, vol. iv. p. 434 (1899).

I have previously given the full synonymy of this species, but now, from an examination of the Hope Collection, am compelled to remove it one stage further back.

DICTYOTUS PALLIPES. (Plate LII. fig. 9.)

Pentatoma pallipes Westw. in Hope Cat. i. p. 41 (1837).

In size and general appearance allied to *D. roei* Westw., but having the head more elongate and not prominently cleft at the apex, the central lobe being longer.

Westwood's type is unlocalized, and I have not seen another specimen.

DICTYOTUS ROEI.

Pentatoma roei Westw. in Hope Cat. i. p. 42 (1837).

Dictyotus affinis Dall. List Hem. i. p. 141. n. 4 (1851).

This is not the species identified by Dallas as *roei* Westw. (List Hem. i. p. 140), which is an ally of *D. tasmanicus* Dall., and is the *D. æqualis* Walk.

NIPHE SUBFERRUGINEA.

Pentatoma ferruginea Westw. in Hope Cat. i. p. 35 (1837).

Pentatoma cephalus Dall. List Hem. i. p. 245. n. 32 (1851).

Pentatoma lateralis Walk. Cat. Het. ii. p. 301 (1867).

Niphe cephalus Dist. Ann. & Mag. Nat. Hist. ser. 7, vol. iv. p. 435 (1899).

TROPICORYPHA DEPLANATA.

Pentatoma deplanata Westw. in Hope Cat. i. p. 35 (1837).

Agonoscelis rufescens Walk. Cat. Het. iii. p. 546 (1868).

Tropicorypha rufescens Dist. Ann. & Mag. Nat. Hist. ser. 7, vol. iv. p. 435 (1899).

PALOMENA PRASINA.

Cimex prasinus Linn. Faun. Suec. p. 241. n. 931 (1761).

Pentatoma confusa Westw. (MS.) in Hope Cat. i. p. 9. n. 65 (1837).

This species stands, as Westwood pointed out, under the name of *juniperinus* in the Banksian Collection. Westwood apparently substituted his name *confusa*, but did not describe the species.

PALOMENA VIRIDISSIMA.

Cimex viridissima Poda, Ins. Mus. Gr. p. 56. n. 10 (1761).

Pentatoma rotundicollis Westw. (MS.) in Hope Cat. i. p. 9. n. 66 (1837).

This appears to be a name substituted by Westwood for "*prasinus* Wolff nec Linn.," and with no published description.

PALOMENA UNICOLOR. (Plate LII. fig. 5.)

Pentatoma unicolor Westw. in Hope Cat. i. p. 41 (1837).

A species allied to *P. spinosa* Dist. and *P. angulosa* Motsch.

PENTATOMA SENILIS.

Pentatoma senilis Say, New Harm. Ind., Dec. 1831; Compl. Writ. i. p. 316. n. 8 (1859); Leth. & Sev. Cat. Gén. Hém. i. p. 120 (1893).

Lioderma (Rhytidolomia) senilis Stål, En. Hem. p. 33. n. 2 (1872).

Pentatoma ovalis (oblonga) Westw. in Hope Cat. i. p. 39 (1837).

Pentatoma grisea Dall. List Hem. i. p. 246. n. 33 (1851).

This is not the *P. oblonga* Westw. loc. cit. p. 37, as stated by Stål (En. Hem. ii. p. 33) and repeated by Lethierry and Severin (Cat. p. 120), which is a Javan species, and a synonym of *Nezara viridula* Linn.

MORMIDEA SCUTELLATA. (Plate LII. fig. 7.)

Pentatoma scutellata Westw. in Hope Cat. i. p. 37 (1837).

EUSCHISTUS SERVUS.

Pentatoma serva Say, New Harm. Ind., Dec. 1831; Compl. Writ. vol. i. p. 314 (1859).

Pentatoma spilota Westw. in Hope Cat. i. p. 42 (1837).

Westwood's habitat is "Brasilia?," but it is doubtless a North American specimen which forms the type of his *P. spilota*.

EUSCHISTUS TRISTIGMUS.

Pentatoma tristigma Say, New Harm. Ind., Dec. 1831 ; Compl. Writ. i. p. 314 (1859).

Pentatoma inconspicua Westw. in Hope Cat. i. p. 42 (1837).

ILERDA PALLESCENS. (Plate LII. fig. 10.)

Pentatoma pallescens Westw. in Hope Cat. i. p. 41 (1837).

A species allied in structure to *I. sudana* Dist.

CARBULA OBSCURA.

Pentatoma obscura Westw. in Hope Cat. i. p. 35 (1837).

CARBULA INSOCIA.

Eysarcoris insocius Walk. Cat. Het. iii. p. 556 (1868).

Pentatoma bimaculata Westw. MS.

In the Hope Cat. i. p. 35, under the MS. name *Pent. bimaculata*, Westwood unites "*Species delenda, varietas precedentis*," referring to his *Carbula* (*Pent.*) *obscura*. The two species are, however, quite distinct and easily distinguished by the shape and structure of the pronotal angles.

CARBULA DIFFICILIS.

Pentatoma difficilis Westw. in Hope Cat. i. p. 35 (1837).

A species resembling largely the *C. insocia* Walk.

CARBULA MELACANTHA.

Cimex melacanthus Fabr. Ent. Syst. iv. p. 103 (1794).

Pentatoma hostilis Westw. in Hope Cat. i. p. 40 (1837).

CARBULA INDICA.

Pentatoma indica Westw. in Hope Cat. i. p. 42 (1837).

Carbula fusca Dist. Trans. Ent. Soc. Lond. 1887, p. 346.

THYANTA ANTIGUENSIS.

Pentatoma antiguensis Westw. in Hope Cat. i. p. 36 (1837).

Pentatoma teniola Dall. List Hem. i. p. 250 (1851).

THYANTA VITREA.

Pentatoma vitrea Westw. in Hope Cat. i. p. 36 (1837).

Type in bad condition, without abdomen.

MURGANTIA VARICOLOR.

Pentatoma varicolor Westw. in Hope Cat. i. p. 37 (1837).

Strachia munda Dall. List Hem. i. p. 264. n. 19 (1851).

Murgantia tessellata? Leth. & Sev. Cat. Gén. Hém. t. i. p. 156 (1893).

NEZARA CHLOROCEPHALA.

Pentatoma chlorocephala Westw. in Hope Cat. i. p. 38 (1837).

Lethierry and Severin (Cat. Gén. Hém. t. i. p. 167) have

placed this species as a synonym of *N. viridula* Linn. From that species *N. chlorocephala* differs by its elongate form, and particularly by its more elongate and narrower head.

Westwood localized it as "Brasilia?" The British Museum possesses specimens from Nyasaland collected by Mr. A. Whyte.

NEZARA CHLORIS.

Pentatoma chloris Westw. in Hope Cat. i. p. 38 (1837).

Pentatoma mentiens Walk. Cat. Het. ii. p. 296. n. 92 (1867).

Stål (En. Hem. ii. p. 41, 1872) places this species as a synonym of *Nezara viridula* Linn. In this case, however, he has fallen into error. *N. chloris* is a smaller, more elongate, narrower, and much more convex species; the head is large and broad.

I possess specimens both from Congo and Nyasaland.

NEZARA CAPICOLA.

Pentatoma capicola Westw. in Hope Cat. i. p. 39 (1837).

Pentatoma lata Westw. loc. cit.

Pentatoma frontalis Westw. loc. cit. p. 37.

Rhaphigaster capicola Dall. List Hem. i. p. 276. n. 5 (1851).

Nezara capicola Stål, Hem. Afr. i. p. 195. n. 3 (1864).

Pentatoma africana Westw. in Hope Cat. i. p. 39 (1837).

P. frontalis and *P. africana* are colour varieties. In the strict usage of the laws of priority, *frontalis* is the earliest name; but as this is clearly a variety or "sport," I do not disturb the arrangement of Dallas and Stål.

NEZARA VIRIDULA.

Cinex viridulus Linn. Syst. Nat. ed. 10, i. p. 444. n. 28 (1758).

Pentatoma oblonga Westw. in Hope Cat. i. p. 37 (1837).

Pentatoma unicolor Westw. loc. cit. p. 38.

Pentatoma berylina Westw. loc. cit.

Pentatoma subsericea Westw. loc. cit.

Pentatoma lei Westw. loc. cit.

Pentatoma tripunctifera Westw. loc. cit.

Pentatoma proxima Westw. loc. cit.

Pentatoma chinensis Westw. loc. cit.

Rhaphigaster subsericeus Dall. List Hem. i. p. 275. n. 3 (1851).

Nezara viridula Stål (part.), En. Hem. ii. p. 41. n. 6 (1872).

ÆTIUS, gen. nov.

Body moderately short, broad, and convex. Head long, almost as long as the pronotum, lateral margins strongly sinuate, lateral lobes a little longer than the central lobe and cleft at apices; antennæ four-jointed, basal joint not quite reaching apex of head, second joint very long, third and fourth joints subequal in length; ocelli placed somewhat near the eyes; rostrum reaching the posterior coxæ, second joint longest. Pronotum broad, the lateral angles produced in long robust spines directed forward

and somewhat upward; anterior lateral margins coarsely dentate, a somewhat larger and lobate tooth at anterior angle. Scutellum broad, sinuate about centre. Connexivum prominent; abdomen beneath with a broad central sulcation, which does not extend to apex.

ÆTIUS VARIEGATUS. (Plate LII. fig. 8.)

Atelocerus? variegatus Westw. in Hope Cat. i. p. 21 (1837).

Hab. Australia: Swan River.

PLAUTIA FIMBRIATA.

Cinex fimbriatus Fabr. Mant. ii. p. 295 (1787).

Pentatoma fimbriata Westw. in Hope Cat. i. p. 32 (1837).

PLAUTIA VIRIDICOLLIS.

Pentatoma viridicollis Westw. in Hope Cat. i. p. 35 (1837).

Plautia viridicollis Leth. & Sev. Cat. Gén. Hém. i. p. 169 (1893).

Pentatoma inconspicua Dall. List Hem. i. p. 250. n. 42 (1851).

CRESPHONTES MONSONI. (Plate LII. fig. 6.)

Raphigaster monsoni Westw. in Hope Cat. i. p. 31 (1837).

Cresphontes nigro-maculatus Haglund, Stett. ent. Zeit. xxix. p. 157 (1868).

Westwood recorded a wrong locality ("Caput Bonæ Spei") for this species. I have compared the types of both Westwood and Haglund.

ANTESTIA CRUCIATA.

Cinex cruciatus Fabr. Syst. Ent. p. 714 (1775).

Pentatoma pantherina Westw. in Hope Cat. i. p. 34 (1837).

Westwood undoubtedly was led astray by the wrong habitat "*Georgia Americæ*" in redescribing this well-known Oriental species.

ACTUARIUS, gen. nov.

Body oblong. Head with the lateral lobes considerably longer than the central lobes, and very distinctly cleft at their apices, which are obliquely rounded, their lateral margins moderately sinuate; ocelli situate between the eyes and nearer to them than to each other. Antennæ with the second joint a little shorter than either third or fourth, which are subequal in length; rostrum about reaching the posterior coxæ, second joint longest, third slightly shorter than the fourth. Pronotum long, moderately convex, the lateral margins sinuate, the posterior angles rounded and subprominent, the anterior angles shortly dentate. Scutellum about half the length of the abdomen, slightly gibbous at base, narrowed towards apex. Corium distinctly moderately widened at about one-third from base; membrane with longitudinal veins.

Abdomen probably spined at base, but mutilated there by pin in type and only specimen.

Allied to *Menida* Motsch.

ACTUARIUS ALBONOTATUS. (Plate LII. fig. 11.)

Pentatoma albonotata Westw. in Hope Cat. i. p. 37 (1837).

Hab. Gambia.

MENIDA HISTRIO.

Cimex histrio Fabr. Mant. ii. p. 296. n. 176 (1787).

Pentatoma bengalensis Westw. in Hope Cat. i. p. 36 (1837).

OCIRRHÖE ROEI. (Plate LII. fig. 12.)

Rhynchocoris roei Westw. in Hope Cat. i. p. 30 (1837); Leth. & Sev. Cat. Gén. Hém. i. p. 181 (1893).

The species identified by Dallas (List Hem. i. p. 297. n. 4, 1851) is not conspecific.

OCIRRHÖE? VIRESCENS. (Plate LIII. fig. 7.)

Raphigaster virescens Westw. in Hope Cat. i. p. 31 (1837).

The type and only specimen is in a very mutilated condition, wanting the abdomen, but the species apparently belongs to the genus *Ocirrhoë*.

AVICENNA, gen. nov.

Head deflected, moderately broad, lobes of equal length, apex rounded, lateral margins moderately sinuate at about centre. Antennæ with the second and third joints subequal in length, or second slightly shorter than the third. Pronotum strongly deflected anteriorly from between the area of the lateral angles; lateral margins moderately concavely sinuate, punctate before anterior margin, posterior margin strongly concave at base of scutellum; posterior angles subprominent, lateral angles produced in long acute spines. Scutellum broad, distinctly narrowed a little before apex. Rostrum with the second and third joints about subequal in length. Sternal process extending beyond base of head. Spines at apices of sixth abdominal segment and anus strongly developed.

This genus agrees with *Morna* in the concave posterior margin of the pronotum, but differs in not having the posterior pronotal angles acutely produced. It is allied to *Vitellus* by the shape and production of the sternal process, but differs by the less triangular and elongate head, the longer and non-triangular scutellum, &c.

AVICENNA INQUINATA. (Plate LIII. fig. 1.)

Rhynchocoris inquinata Westw. in Hope Cat. i. p. 29 (1837).

Cuspicona inquinata Walk. Cat. Het. ii. p. 387. n. 29 (1867).

Vitellus inquinatus Leth. & Sev. Cat. Gén. Hém. p. 182 (1893).

EDESSE LINEATA.

Edessa lineata Westw. in Hope Cat. i. p. 28 (1837).

Allied to *E. saturata* Dall., differing by the unicolorous connexivum and the non-apically excavated scutellum.

EDESSE MINIATA.

Edessa miniata Westw. in Hope Cat. i. p. 28 (1837).

Edessa scutellata Herr.-Schäff. Wanz. Ins. v. p. 101, fig. 552 (1839); Stål, En. Hem. ii. p. 55. n. 36 (1872).

Var. *Edessa lurida* Dall. List Hem. i. p. 328. n. 28 (1851); Stoll, Pun. fig. 148.

EDESSE FLAVIDA.

Edessa flavida Westw. in Hope Cat. i. p. 28 (1837); Stål, En. Hem. ii. p. 53. n. 21 (1872).

Edessa lutea Westw. in Hope Cat. i. p. 28 (1837).

Edessa simplex Herr.-Schäff. Wanz. Ins. v. p. 103, fig. 554 (1839).

Edessa jutea Stål, En. Hem. ii. p. 59. n. 76 (1872).

This is quite distinct from the species recorded as *E. flavida* and *E. lutea* by Dallas.

EDESSE CARNOSA.

Edessa carnosa Westw. in Hope Cat. i. p. 29 (1837).

Aceratodes costalis Stål, Eug. Resa, Ins. p. 231. n. 29 (1859).

Edessa senilis Walk. Cat. Het. iii. p. 450. n. 128 (1868).

Edessa fulvipes var. *costalis* Stål, En. Hem. ii. p. 58 (1872); Dist. Biol. Centr.-Amer., Rhyn. vol. i. p. 458. n. 39 (v) (1893).

Var. *Aceratodes fulvipes* Dall. List Hem. i. p. 335. n. 6 (1851).

The form *costalis* Stål has hitherto been recorded as the variety of *E. fulvipes* Dall. Now that Stål's *costalis* is found to be synonymic with *E. carnosa* Westw. the oldest name, the subsequently described *E. fulvipes* Dall. must be regarded as the varietal form.

Subfam. ASOPINÆ.

DORYCORIS FUSCOSUS.

Asopus fuscus Germ. in Silberm. Rev. v. p. 187 (1837).

Pentatoma miniata Westw. in Hope Cat. i. p. 43 (1837).

Both these descriptions were published in the year 1837, and there is no evidence as to which appeared first. The species has been hitherto known and recorded under Germar's name, and it is therefore better to make no alteration.

AUDINETIA SPINIDENS.

Cimex spinidens Fabr. Mant. Ins. ii. p. 285 (1787).

Pentatoma aliena Westw. in Hope Cat. i. p. 40 (1837).

GLYPsus SPARSUS. (Plate LIII. fig. 5.)

Ælia sparsa Westw. in Hope Cat. i. p. 33 (1837).*Ælia assimilis* Westw. loc. cit.

PODISUS NEGLECTUS. (Plate LIII. fig. 4.)

Raphigaster neglectus Westw. in Hope Cat. i. p. 31 (1837).*Podisus neglectus* Stål, En. Hem. i. p. 53. n. 29 (1870).

Subfam. TESSARATOMINÆ.

TESSARATOMA PAPILLOSA.

Cimex papillosus Drury, Ill. Nat. Hist. i. p. 96, tab. 43. fig. 2 (1770).*Tesseratoma proxima* Westw. in Hope Cat. i. p. 27 (1837).

Stål (En. Hem. i. p. 67, 1870) treats *T. proxima* as a synonym of *T. javanica* Thunb., restricting *T. papillosa* to China only. This, in my view, is clearly incorrect.

Subfam. PHYLLOCEPHALINÆ.

MELAMPODIUS, gen. nov.

Head with the lateral lobes very much longer than the central, projecting forward and somewhat upward, their apices wide apart; ocelli placed very close to the eyes. Antennæ of five joints; basal joint very stout, reaching to about half the length of the lateral lobes; apical joint somewhat thickened. Rostrum passing the anterior coxæ, stout, third joint longest. Pronotum with the lateral angles produced forward in long, slightly diverging horns, which are strongly toothed internally. Scutellum broad, narrowed about midway to apex. Membrane with longitudinal veins. Legs stout and pilose.

Allied to *Cressona* Dall.

MELAMPODIUS CERVICORNIS. (Plate LIII. fig. 10.)

Atelocerus cervicornis Westw. in Hope Cat. i. p. 21 (1837).*Hab.* Sierra Leone.

BASICRYPTUS IRRORATUS. (Plate LIII. fig. 6.)

Phyllocephala irrorata Westw. in Hope Cat. i. p. 27 (1837).

Subfam. ACANTHOSOMINÆ.

ACANTHOSOMA LATERALIS.

Edessa lateralis Say, New Harm. Ind., Dec. 1831; Compl. Writ. i. p. 312. n. 2 (1859).

Acanthosoma affinis Westw. in Hope Cat. i. p. 30 (1837).*Acanthosoma picicolor* Westw. loc. cit.

ACANTHOSOMA CRUCIATA.

Edessa cruciata Say, New Harm. Ind., Dec. 1831; Compl. Writ. i. p. 311 (1859).

Acanthosoma borealis Westw. in Hope Cat. i. p. 30 (1837).

SASTRAGALA VARIOLOSA. (Plate LIII. fig. 3.)

Acanthosoma variolosa Westw. in Hope Cat. i. p. 30 (1837).

A species allied to *S. binotata* Dist.

SPECIES OF UNCERTAIN POSITION.

—— ? ATRICORNIS. (Plate LIII. fig. 8.)

Ælia atricornis Westw. in Hope Cat. i. p. 32 (1837).

I do not quite see my way to generically locate this species. The antennæ are in too mutilated a condition for the foundation of a new genus, and as the species is now figured, it will be well to wait for more perfect material before deciding its classificatory position.

—— ? NIGRIPES.

Pentatoma nigripes Westw. in Hope Cat. i. p. 41 (1837).

The solitary type specimen is without abdomen and lacking also half the scutellum. It is thus in too mutilated a condition for figuring or for generic identification.

—— ? HARRISI. (Plate LIII. fig. 2.)

Pentatoma harrisii Westw. in Hope Cat. i. p. 41 (1837).

Westwood gives the habitat of this species as "*Georgia America*," a locality we have already seen, as in his *P. pantherina* = *Antestia cruciata*, he had applied to an Oriental species. I can find no trace of this species in the descriptions of North-American Pentatomidæ, which are now presumably fairly complete, and am inclined to consider that the locality is also incorrect. It is therefore perhaps better to figure the species and leave the genus an open question till its locality is authenticated.

—— ? LATERALIS. (Plate LIII. fig. 9.)

Pentatoma lateralis Westw. in Hope Cat. i. p. 43 (1837).

The typical and only specimen is in a bad condition, with the rostrum wholly absent. Generic identification is thus impossible.

Summarized Disposition of the Hopeian Genera and Species.

PENTATOMIDÆ.

NEW GENERA DESCRIBED.

Plataspis Westw. in Hope Cat. i. p. 16 (1837).

Hoplistodera Westw. loc. cit. p. 18.

Aplosterna Westw. loc. cit. p. 26.

Lyramorpha Westw. loc. cit. p. 27.

Rhynchocoris Westw. loc. cit. p. 29.

Urolabida Westw. loc. cit. p. 45.

Urostylis Westw. loc. cit.

<i>Callidea purpurea</i> Westw. loc. cit. p. 15		belongs to genus <i>Chrysocoris</i> .
„ <i>marginella</i> Westw. loc. cit.	„ „	„
„ <i>obtusa</i> Westw. loc. cit. p. 16	„ „	<i>Lamprocoris</i> .
„ <i>roylii</i> Westw. loc. cit.	„ „	„
„ <i>purpurata</i> Westw. loc. cit.	„ „	<i>Cantao</i> .
<i>Plataspis hemispherica</i> Westw. loc. cit. p. 17	„ „	<i>Brachyplatys</i> .
„ <i>nitida</i> Westw. loc. cit.	„ „	„
„ <i>subanica</i> Westw. loc. cit.	„ „	„
„ <i>nigriventris</i> Westw. loc. cit. p. 18	„ „	„
<i>Cydnus piceus</i> Westw. loc. cit. p. 18	„ „	<i>Adrisa</i> .
„ <i>latipes</i> Westw. loc. cit.	„ „	<i>Scoparipes</i> .
„ <i>serripes</i> Westw. loc. cit. p. 19	„ „	<i>Pangeus</i> .
„ <i>subferrugineus</i> Westw. loc. cit.	„ „	<i>Amnestus</i> .
<i>Megarhynchus acanthurus</i> Westw. loc. cit. p. 20	„ „	<i>Diploarys</i> .
<i>Atelocerus furcatus</i> Westw. loc. cit.	„ „	<i>Diplorhinus</i> .
„ <i>centro-lineatus</i> Westw. loc. cit.	„ „	<i>Omyta</i> .
„ <i>rugosus</i> Westw. loc. cit. p. 21	„ „	<i>Orthoschizops</i> ?
„ <i>cervicornis</i> Westw. loc. cit.	„ „	<i>Melampodius</i> , g. n.
„ <i>varicornis</i> Westw. loc. cit.	„ „	<i>Aleaus</i> .
„ <i>variegatus</i> Westw. loc. cit.	„ „	<i>Ætius</i> , g. n.
<i>Halys assimilis</i> Westw. loc. cit. p. 21	„ „	<i>Orthoschizops</i> .
„ <i>parvula</i> Westw. loc. cit. p. 22	„ „	<i>Spudæus</i> .
„ <i>nigricollis</i> Westw. loc. cit.	„ „	<i>Dalpada</i> .
„ <i>alternans</i> Westw. loc. cit.	„ „	<i>Nevisanus</i> .
„ <i>lata</i> Westw. loc. cit. p. 23	„ „	<i>Atelocera</i> .
„ <i>apicalis</i> Westw. loc. cit.	„ „	<i>Eumecopus</i> .
„ <i>strigata</i> Westw. loc. cit.	„ „	<i>Pæcilometis</i> .
„ <i>reticulata</i> Westw. loc. cit. p. 24	„ „	<i>Spudæus</i> .
„ <i>lineata</i> Westw. loc. cit.	„ „	<i>Pæcilometis</i> .
<i>Dinidor melanoleucus</i> Westw. loc. cit.	„ „	<i>Dinocoris</i> .
„ <i>tesselatus</i> Westw. loc. cit.	„ „	„
„ <i>variolosus</i> Westw. loc. cit. p. 25	„ „	„
„ <i>dispar</i> Westw. loc. cit.	„ „	<i>Hyrmine</i> .
„ <i>unicolor</i> Westw. loc. cit.	„ „	<i>Dinocoris</i> .
<i>Aspongopus siccifolius</i> Westw. loc. cit.	„ „	<i>Cyclopelta</i> .
<i>Phyllocephala irrorata</i> Westw. loc. cit. p. 27	„ „	<i>Basicryptus</i> .
<i>Eusthenes laticollis</i> Westw. loc. cit.	„ „	<i>Mattiphus</i> .
<i>Tesseratoma cuprea</i> Westw. loc. cit.	„ „	<i>Eusthenes</i> .
„ <i>taurus</i> Westw. loc. cit.	„ „	<i>Emblosterna</i> .
<i>Edessa nodifera</i> Westw. loc. cit. p. 28	„ „	<i>Peromatus</i> .
<i>Rhynchocoris inquinata</i> Westw. loc. cit. p. 29	„ „	<i>Avicenna</i> , g. n.
„ <i>unimaculata</i> Westw. loc. cit.	„ „	<i>Ocirrhoë</i> ?
„ <i>thoracica</i> Westw. loc. cit. p. 30	„ „	<i>Cuspicona</i> .
„ <i>roei</i> Westw. loc. cit.	„ „	<i>Ocirrhoë</i> .
<i>Acanthosoma variolosa</i> Westw. loc. cit.	„ „	<i>Sastrigala</i> .
<i>Raphigaster neglectus</i> Westw. loc. cit. p. 31	„ „	<i>Podisus</i> .
„ <i>luteus</i> Westw. loc. cit.	„ „	<i>Platacantha</i> .
„ <i>guldinigi</i> Westw. loc. cit.	„ „	<i>Piezodorus</i> .
„ <i>flavolineatus</i> Westw. loc. cit.	„ „	„

<i>Raphigaster virescens</i> Westw. loc. cit.	belongs to genus	<i>Ocirrhoë</i> ?
„ <i>monsoni</i> Westw. loc. cit.	„	<i>Cresphontes</i> .
„ <i>longitudinalis</i> Westw. loc. cit.	„	<i>Axona</i> .
<i>Ælia nasalis</i> Westw. loc. cit. p. 32	„	<i>Cermatulus</i> .
„ <i>erosa</i> Westw. loc. cit. p. 33	„	<i>Agonoscelis</i> .
„ <i>melanoleuca</i> Westw. loc. cit.	„	<i>Platynopus</i> .
„ <i>sparsa</i> Westw. loc. cit.	„	<i>Glypsus</i> .
„ <i>conspicua</i> Westw. loc. cit.	„	„
„ <i>varicornis</i> Westw. loc. cit.	„	<i>Kalula</i> , g. n.
<i>Pentatoma formosa</i> Westw. loc. cit. p. 34	„	<i>Menida</i> .
„ <i>violascens</i> Westw. loc. cit.	„	<i>Murgantia</i> .
„ <i>gloriosa</i> Westw. loc. cit.	„	<i>Stenozygum</i> .
„ <i>varia</i> Westw. loc. cit.	„	„
„ <i>deplanata</i> Westw. loc. cit. p. 35	„	<i>Tropicorypha</i> .
„ <i>obscura</i> Westw. loc. cit.	„	<i>Carbula</i> .
„ <i>difficilis</i> Westw. loc. cit.	„	„
„ <i>subferruginea</i> Westw. loc. cit.	„	<i>Niphe</i> .
„ <i>viridicollis</i> Westw. loc. cit.	„	<i>Plautia</i> .
„ <i>ventralis</i> Westw. loc. cit. p. 36	„	<i>Eysarcoris</i> .
„ <i>lineaticollis</i> Westw. loc. cit.	„	<i>Æliomorpha</i> .
„ <i>caffrae</i> Westw. loc. cit.	„	„
„ <i>antiquensis</i> Westw. loc. cit.	„	<i>Thyanta</i> .
„ <i>vitrea</i> Westw. loc. cit.	„	„
„ <i>albo-notata</i> Westw. loc. cit. p. 37	„	<i>Actuarius</i> , g. n.
„ <i>varicolor</i> Westw. loc. cit.	„	<i>Murgantia</i> .
„ <i>marginalis</i> Westw. loc. cit.	„	<i>Oplomus</i> .
„ <i>scutellata</i> Westw. loc. cit.	„	<i>Mormidea</i> .
„ <i>chloris</i> Westw. loc. cit. p. 38	„	<i>Nezara</i> .
„ <i>chlorocephala</i> Westw. loc. cit.	„	„
„ <i>capicola</i> Westw. loc. cit. p. 39	„	„
„ <i>crassa</i> Westw. loc. cit.	„	<i>Zangis</i> .
„ <i>pavonina</i> Westw. loc. cit.	„	<i>Dorycoris</i> .
„ <i>bronzea</i> Westw. loc. cit. p. 40	„	„
„ <i>luteipennis</i> Westw. loc. cit.	„	<i>Loxa</i> .
„ <i>atrox</i> Westw. loc. cit.	„	<i>Euchistus</i> .
„ <i>crocipes</i> Westw. loc. cit.	„	„
„ <i>3-maculata</i> Westw. loc. cit.	„	<i>Dalpada</i> .
„ <i>3-notata</i> Westw. loc. cit.	„	<i>Tolumnia</i> .
„ <i>unicolor</i> Westw. loc. cit. p. 41	„	<i>Palomena</i> .
„ <i>pallescens</i> Westw. loc. cit.	„	<i>Plerda</i> .
„ <i>pallipes</i> Westw. loc. cit.	„	<i>Dictyotus</i> .
„ <i>roei</i> Westw. loc. cit. p. 42	„	„
„ <i>indica</i> Westw. loc. cit.	„	<i>Carbula</i> .
„ <i>semimarginata</i> Westw. loc. cit.	„	<i>Dictyotus</i> .
„ <i>cænosa</i> Westw. loc. cit.	„	„
„ <i>purpurea</i> Westw. loc. cit. p. 43	„	<i>Afrius</i> .
„ <i>varipennis</i> Westw. loc. cit.	„	<i>Menida</i> .
„ <i>platygaster</i> Westw. loc. cit.	„	<i>Candace</i> .
„ <i>aculeata</i> Westw. loc. cit. p. 44	„	<i>Myrochea</i> .
„ <i>rufo-spilota</i> Westw. loc. cit.	„	<i>Lineus</i> .

<i>Pentatoma rugicollis</i> Westw. loc. cit.	belongs to genus	<i>Basicryptus</i> .
„ <i>cunningii</i> Westw. loc. cit.	„ „	<i>Ditomotarsus</i> .
„ <i>marginella</i> Westw. loc. cit. p. 45	„ „	<i>Lubentius</i> .
„ <i>luteo-varia</i> Westw. loc. cit.	„ „	<i>Anischys</i> .
<i>Urostylis histrionica</i> Westw. loc. cit. p. 46	„ „	<i>Urolabida</i> .

SPECIES TREATED AS SYNONYMIC.

<i>Eurygaster cognatus</i> Westw. in Hope	=	<i>Eurygaster maurus</i> Linn.
	[Cat. i. p. 11.	
„ <i>orientalis</i> Westw. l. c.	=	<i>E. maurus</i> Linn., var. <i>pictus</i> [Fabr.
<i>Trigonosoma apicale</i> Westw. l. c.	=	<i>Hotea gambiæ</i> Westw.
<i>Agonosoma bicolor</i> Westw. l. c. p. 12	=	<i>Agonosoma trilineata</i> Fabr., [var.
<i>Pachycoris linnæi</i> Westw. l. c.	=	<i>Pachycoris torridus</i> Scop., var.
„ <i>nitens</i> Westw. l. c.	=	<i>Pachycoris fabricii</i> Linn., var.
„ <i>pumila</i> Westw. l. c.	=	„ „ „
„ <i>flavescens</i> Westw. l. c.	=	<i>Diolcus irroratus</i> Fabr.
„ <i>piperitia</i> Westw. l. c. p. 13	=	<i>Ascanius hirtipes</i> Herr.-Sch.
<i>Sphærocoris annularis</i> Westw. l. c.	=	<i>Sphærocoris annulus</i> Fabr.
„ <i>punctaria</i> Westw. l. c.	=	<i>Sphærocoris testudo-grisea</i> [De Geer, var.
„ <i>4-notata</i> Westw. l. c.	=	<i>Steganocerus multipunctatus</i> [Thunb., var.
„ <i>polysticta</i> Westw. l. c.	=	<i>Sphærocoris testudo-grisea</i> [De Geer, var.
<i>Tectocoris affinis</i> Westw. l. c.	=	<i>Pæcilocoris hardwickii</i> Westw.
„ <i>gambiæ</i> Westw. l. c. p. 14	=	<i>Tectocoris lineola</i> Fabr., var.
„ <i>javana</i> Westw. l. c.	=	<i>Chrysocoris atricapillus</i> Guér.
„ <i>nepalensis</i> Westw. l. c.	=	<i>Scutellera fasciata</i> Panz.
„ <i>obscura</i> Westw. l. c.	=	<i>Calliphara excellens</i> Burm.
„ <i>binotata</i> Westw. l. c. p. 15	=	<i>Philea senator</i> Fabr., var.
<i>Callidea abdominalis</i> Westw. l. c.	=	<i>Chrysocoris dilaticollis</i> Guér.
„ <i>formosa</i> Westw. l. c.	=	<i>Chrysocoris eques</i> Fabr., var.
„ <i>taprobanensis</i> Westw. l. c.	=	<i>Chrysocoris stockerus</i> Linn.
„ <i>aurifera</i> Westw. l. c.	=	<i>Chrysocoris auratus</i> Guér.
„ <i>bengalensis</i> Westw. l. c.	=	<i>Chrysocoris patricius</i> Fabr.
„ <i>dispar</i> Westw. l. c. p. 16	=	<i>Cantao ocellatus</i> Thunb.
„ <i>regia</i> Westw. l. c.	=	<i>Calliphara imperialis</i> .
„ <i>pulchra</i> Westw. l. c.	=	<i>Graptophara reynaudii</i> Guér.
<i>Augocoris gigas</i> Westw. l. c.	=	<i>Augocoris gomesi</i> Burm.
<i>Plataspis flaviceps</i> Westw. l. c. p. 17	=	<i>Brachyplatys flavipes</i> Fabr.
<i>Stiretrus rubro-maculatus</i> Westw.	=	<i>Stiretrus decemguttatus</i> Lep. & [l. c. p. 18. [Serv.
<i>Sciocoris cupensis</i> Westw. l. c.	=	<i>Pododus orbicularis</i> Burm.
<i>Megarhynchus 4-spinosus</i> Westw.	=	<i>Tetroda histeroides</i> Fabr.
	[l. c. p. 19.	
„ <i>marginellus</i> Westw.	=	<i>Macrina juvenca</i> Burm.
	[l. c. p. 20.	

- Halys humeralis* Westw. l. c. p. 21 = *Euoplilus laciniatus* Spin.
 „ *carolinensis* Westw. l. c. p. 22 = *Brochymena annulata* Fabr.
 „ *timorensis* Westw. l. c. = *Halyomorpha picus* Fabr.
 „ *obscura* Westw. l. c. = *Dalpada nigricollis* Westw.
 „ *serrigera* Westw. l. c. p. 23 = *Halys dentata* Fabr.
 „ *concinna* Westw. l. c. = *Dalpada clavata* Fabr.
 „ *serricollis* Westw. l. c. = *Halys dentata* Fabr.
 „ *latipes* Westw. l. c. = *Dalpada clavata* Fabr.
Dinidor punctiger Westw. l. c. p. 25 = *Dinocoris tripterus* Fabr.
Aspongopus vicinus Westw. l. c. = *Aspongopus janus* Fabr.
 „ *alternans* Westw. l. c. = *Cyclopelta obscura* Lep. &
 [p. 26. [Serv.
Tessaratoma proxima Westw. l. c. = *Tessaratomya papillosa* Dru.
 [p. 27.
Lyramorpha pallida Westw. l. c. = *Lyramorpha rosea* Westw.
 [p. 28.
Edessa lutea Westw. l. c. = *Edessa flavida* Westw.
 „ *vicina* Westw. l. c. p. 29 = *Piezosternum calidum* Fabr.
Acanthosoma luteicornis Westw. l. c. = *Arvelius albopunctatus* De
 [p. 30. [Geer.
 „ *picicolor* Westw. l. c. = *Acanthosoma lateralis* Say.
 „ *affinis* Westw. l. c. = „ „
 „ *borealis* Westw. l. c. = *Acanthosoma cruciata* Say.
Raphigaster transversalis Westw. = *Platacantha lutea* Westw.
 [l. c. p. 31.
 „ *punctulatus* Westw. l. c. = *Piezodorus incarnatus* Germ.
 „ *abdominalis* Westw. l. c. = *Vulsirea violacea* Fabr.
 [p. 32.
Elia crucifera Westw. l. c. = *Agonoscelis nubila* Fabr.
 „ *sanguinea* Westw. l. c. = *Agonoscelis venosa* Thunb.
 „ *gambiensis* Westw. l. c. = *Agonoscelis versicolor* Fabr.
 „ *infuscata* Westw. l. c. = „ „
 „ *depressa* Westw. l. c. = *Dolycoris baccarum* Linn.
 „ *assimilis* Westw. l. c. p. 33 = *Glypsus sparsus* Westw.
Pentatoma equinoxialis Westw. l. c. = *Arocera acroleuca* Perty.
 „ *nitida* Westw. l. c. = *Nezara marginalis* Herr.-Sch.
 „ *pantherina* Westw. l. c. = *Antestia cruciata* Fabr.
 [p. 34.
 „ *binotata* Westw. l. c. = *Dismegistus sanguineus* De
 [Geer.
 „ *wilkinsoni* Westw. l. c. = *Carpocoris nigricornis* Fabr.
 [p. 35.
 „ *bimaculata* Westw. l. c. = *Carbula insocia* Walk.
 „ *pennsylvanie* Westw. l. c. = *Hymenarcys nervosa* Say.
 „ *orbitalis* Westw. l. c. = *Antestia variegata* Thunb.
 „ *nepalensis* Westw. l. c. = *Eysarcoris guttiger* Thunb.
 [p. 36.
 „ *punctipes* Westw. l. c. = „ „
 „ *bengalensis* Westw. l. c. = *Menida histrio* Fabr.

Pentatoma 3-fasciata Westw. l. c. = *Murgantia bifasciata* Fabr.

[p. 37.

„ *frontalis* Westw. l. c. = *Nezara capicola* Westw., var.

„ *oblonga* Westw. l. c. = *Nezara viridula* Linn.

„ *unicolor* Westw. l. c. p. 38 = „ „

„ *berylina* Westw. l. c. = „ „

„ *subsericea* Westw. l. c. = „ „

„ *leii* Westw. l. c. = „ „

„ *3-punctigera* Westw. l. c. = „ „

„ *proxima* Westw. l. c. = „ „

„ *chinensis* Westw. l. c. = „ „

„ *lata* Westw. l. c. p. 39 = *Nezara capicola* Westw., var.

„ *africana* Westw. l. c. = „ „

„ *ovalis* Westw. l. c. = *Pentatoma senilis* Say.

„ *fimbriata* Westw. l. c. = *Plautia fimbriata* Fabr.

„ *concinna* Westw. l. c. = *Zicrona cœrulea* Linn.

„ *violacea* Westw. l. c. = „ „

„ *aliena* Westw. l. c. p. 40 = *Audinctia spinidens* Fabr.

„ *crudelis* Westw. l. c. = *Veterna sanguineirostris*

[Thunb.

„ *hostilis* Westw. l. c. = *Carbula melacantha* Fabr.

„ *collaris* Westw. l. c. = *Thyanta perditor* Fabr.

„ *sublurida* Westw. l. c. = *Podisus luridus* Fabr.

[p. 41.

„ *spilota* Westw. l. c. p. 42 = *Euschistus servus* Say.

„ *inconspecta* Westw. l. c. = *Euschistus tristigmus* Say.

„ *pulchella* Westw. l. c. = *Stiretrus anchorago* Fabr.

„ *anchorago* Westw. l. c. = „ „

„ *miniata* Westw. l. c. p. 43 = *Dorycoris fuscus* Germ.

„ *miniaticollis* Westw. l. c. = *Agonoscelis venosa* Thunb.

„ *bifida* Westw. l. c. = *Macropygium reticulare* Fabr.

„ *bufo* Westw. l. c. p. 44 = *Hypogomphus bipunctatus*

[Guér.

„ *interrupta* Westw. l. c. = *Basicryptus rugicollis* Westw.

„ *angularis* Westw. l. c. = *Dalsira modesta* Fabr.

SPECIES WITH GENERIC DETERMINATION STILL UNDECIDED.

Alia atricornis Westw. in Hope Cat. i. p. 32.

Pentatoma harrisii Westw. loc. cit. p. 41.

„ *nigripes* Westw. loc. cit.

„ *lateralis* Westw. loc. cit. p. 43.

TYPES NOW MISSING FROM COLLECTION.

Halys rufescens Westw. in Hope Cat. i. p. 24.

„ *gravis* Westw. loc. cit.

„ *dentipes* Westw. loc. cit.

Pentatoma pulchra Westw. loc. cit. p. 34.

